

How the smallest state in Australia ended up leading in the Australian GLAM sector: the power of collaboration when you only have a small project budget

The University of Tasmania's Special & Rare Collections includes rare and valuable research material and artefacts, including the Royal Society of Tasmania Library and other special collections of national and international significance. A significant proportion of the collections are not easily discoverable online because they have received little or no detailed description.

A successful University Research Infrastructure submission, saw the allocation of a small grant to the Library to select and implement an online archival description and content management system, over a twelve month period. This paper will chart a journey from the excitement of initial bid success, to the successful recruitment of an experienced and enthusiastic Project Manager, to the establishment of an engaged Steering Committee, with senior university academics, Information Technology Services representation and colleagues from the wider Tasmanian GLAM sector. Then go on to show the challenges of tight timeframes, unexpected developments, as well as managing a plethora of competing priorities, perspectives and expectations.

The paper will also document how the project ultimately reached its successful conclusion. A system selected and implemented, a roadmap for the future developed for the Library. Relationships built between the Library and other Tasmanian GLAM institutions, while collaborating on the project, opening doors for potential ongoing valuable collaboration opportunities.

Introduction and background

A significant proportion of the University of Tasmania Library's Special & Rare Collections, containing unique primary research materials, are not easily discoverable online because they have received little or no detailed description. The research potential of these collections remained untapped. Undiscovered in these collections are diaries, letters, documents, images and other artefacts relating to Tasmania's environment, history and culture. They cover topics such as flora and fauna, Tasmanian Aborigines, early colonial and convict life, prominent Tasmanians and their families and more. Jones (2004, p. 105) states that "the cost to scholarship and society of having so much of our cultural record sitting on shelves, inaccessible to researchers and to the public, represents an urgent need of the highest order".

The University has long recognised the importance of cultural collections to the University's research advantage and reputation. There has been interest in the possible development of a University Museum of Arts and Sciences (UMAS), bringing together the University's unique and varied collections. Concurrently, the [Tasmanian Archives and Heritage Office](#) (TAHO) and the [Tasmanian Museum and Art Gallery](#) (TMAG) had begun looking to replace their outdated collection/ archival management systems. TAHO and TMAG had been working together with the intent to create a shared discovery system, to enable seamless discovery and access to Tasmania's unique cultural heritage.

In 2015, the Library submitted its bid to the University's Research Infrastructure Committee, to select and implement an online archival description and content management system, to make unique primary source material housed in the Library's Special & Rare Collections, globally discoverable online. The Library recognised the valuable collaborative opportunity early on and so when drafting our funding bid, held a

number of conversations with both TMAG and TAHO, so as to explore the potential collaborative opportunities with any identified system.

Project initiation and approach

The Committee provisionally approved a grant, covering a two year period, to support the following objectives:

- Investigate, recommend and implement a discovery system
- Plan and prioritise the population and/or migration of the chosen archival description and content management system and potential migration of items currently in the Library's open access repository.
- Ensure adopted systems have capacity and flexibility for potential growth and diversity in collections
- Ensure interoperability with other relevant university systems and repositories and potential interoperability with systems from other Tasmanian cultural institutions

A number of potential outcomes from the project were identified. The content of these unprocessed collections would be documented and made globally available for the first time. This would expose this content as primary source material of relevance to current and future University research projects. This could lead to increased potential for future research projects and grants. Researchers anywhere in the world, at any career stage, would be able to identify unique research opportunities utilising the Special & Rare Collections. Special & Rare Collections could actively contribute to the prestige, reputation and distinctiveness of the University.

An externally recruited Project Manager with extensive project management experience was appointed and commenced in mid-May 2016. The project completion date was 31 January 2017. A Project Steering Committee was established and included two senior academics, the University's Professor of Digital Humanities and the Associate Dean Research (Faculty of Arts); the Manager of the University's eResearch Infrastructure in Information Technology Services (ITS), as well as representatives from TMAG and TAHO. [The Queen Victoria Museum and Art Gallery](#) (QVMAG) in the north of the state, maintained a watching brief. The author was the Project Sponsor and supervised the Project Manager.

The original scope of the project included solution design elements such as business, technology, process and change. Practically, this meant the development of the procurement documentation; the planning and implementation of an agreed pilot, to develop and test content related practices, such as metadata and supporting processes, system functionality and training; as well as the planning and implementation of an agreed organisational change plan to communicate and manage the impact of the change.

Out of scope, was any content migration, other than the agreed pilot; implementation of the proposed system into areas other than the agreed pilot and related potential projects identified throughout the process.

Four broad areas were clearly articulated as part of the Project Plan, as being essential for any system selected.

- Archival and preservation function: curated repository of high-quality files in a range of formats from pages, images, objects, sound and video and high-quality metadata, that aligns with current best practices
- Research function: provide high quality search functions supported by richly encoded data and metadata; optimised for search engines to ensure content is globally discoverable; provide thematic research collections to attract the interest of researchers and students, from many disciplines, and community/non-academic researchers

- Quality user experience: capitalise on developing technologies to showcase digital items, allowing a high quality experience of artefacts such as 3D objects, film, sound and images; capacity for user content creation and contribution, including volunteers
- Interoperability: interoperability with existing University systems and repositories, and other developments in Tasmania's cultural institutions

Early stage challenges

From the beginning, the Project Manager had a much larger vision. She saw the project as an opportunity to create the beginnings of something exciting, for the whole state of Tasmania. Engagement from within the University and from both the wider Tasmanian sector and beyond was strong and enthusiastic. The project timing coincided with a number of other initiatives across the Australian Galleries, Libraries, Archives and Museums sector, including Glam Peak's [Digital Access to Collections](#) project. The Library's Special & Rare Collections were selected as one of six case studies, as part of that project.

Another initiative was the work underway at TMAG. As part of a project that they were involved with, TMAG had engaged [GAIA Resources](#) to work on *The Tasmanian Collection – Pilot Project*, which was looking at how to create a common, aggregated digital entry to Tasmania's cultural collections and how this could contribute to the development of cultural tourism. Special & Rare Collections were involved with the consultation phase of the project. The project aimed to produce a pilot web resource and investigate positioning it into the future, as a sustainable and useful resource for all museums and heritage societies across the state. Our project agreed early on to support this project and collaborate on a joint University/TMAG project pilot.

One of the Project Manager's valuable skills became clear very early on, the ability to be able to seek out people across the state, the country or the world, who she thought would be able to provide that important bit of information that the project required at any one time. As the environmental scan progressed, there was a danger of scope creep due to the sheer volume of information being shared. The project demanded an ability to think at a very high strategic and broad level and to be able to ingest and retain enormous amounts of information. The project began to focus not on only what could be achieved in the first year but also the second, third and on to a ten year plan. Enthusiasm spread and generated a belief in a vision that could generate a great number of associated projects. A roadmap for the future was being developed and it was big and it was exciting.

The University of Tasmania Library has only a small team of staff. There are six portfolio areas and three of the Senior Librarians/Managers roles intersected with this project – Collections, Discovery and Systems. The Project Manager was the only person employed to work exclusively on the project initially, the assumption being that the Special & Rare Librarian would be deployed and additional casual staff could be recruited, depending on need and budget.

The Library's Special & Rare Collections is staffed by two part time staff members. A Librarian at 60% and a Library Officer at 50%. The team is led by the Senior Librarian (Collections), who also has responsibility for the wider Library print collections, as well as the Document Delivery service and in 2016, a major review of the Library's subscriptions. Due to circumstances beyond the Library's control, the Special & Rare Librarian and Library Officer were both absent from the role for part or most of 2016. The Special & Rare Librarian position was backfilled on a temporary basis by a Librarian from elsewhere in the Library for the duration of the project. Internal capacity to support the project was limited. The project also exposed skill gaps in the Library team. It became clear that, not only would there need to be a technical implementation but we would also require a completely different way of thinking about the collection and potentially the whole service.

Capacity issues were not restricted to the Library. The Steering Committee members were understandably all working under enormous pressure and time constraints as well. Steering Committee meetings could be challenging at times to schedule and it was also difficult at times, for them to respond to requests for feedback and information. Adding to this, some of the University's internal administrative processes, on occasion, created perceived roadblocks for the Project Manager. Across the board, the challenges and pressures that were brought to bear on all involved, needed understanding and careful management.

In August the goal posts shifted. It became apparent that there was no assured further funding to consider a proprietary system. The project would need to look instead to open source, with all the possible associated issues of ongoing development and support that could mean and the solution needed to be implemented by the end of January 2017.

So, a reset was required. As the Project Sponsor and supervisor of the Project Manager, the author had initially taken a 'hands off' approach to the project. This involved meeting weekly with the Project Manager for an update on progress and providing as much advice as possible around how she could successfully work her way through the University's processes and procedures. More direct involvement in the project was now required, particularly around being an intermediary and negotiator between the Project Manager and the relevant Library staff, when key information was essential to progress. A casual staff member was also appointed to support the project. They provided some administrative support but focused primarily on preparation for the pilot. This included selecting and documenting Special & Rare maps, as well as working with one of the Library's key donors, whose Tasmanian images were to be an integral part of the pilot. The Project Manager began to narrow the focus down to what the project could afford and what could be implemented in the designated time frame.

Implementation phase

By the October meeting of the Project Steering Committee, a report was ready for the Committee to approve the selection of an open source solution developed in Canada, Artefactual's [Access to Memory or AtoM](#). AtoM is an archival description and workflow tool, based on international archival standards and is used extensively throughout the US and Canada. In Australia, AtoM is the platform used by a number of organisations including the Australian National University's [Butlin Archive](#), the [State Archives of Western Australia](#) and it is currently being implemented at the University of Melbourne's [Percy Grainger Museum](#). It is also under consideration by a number of other Australian and New Zealand GLAM sector organisations. AtoM is scalable as a portal and repository for multiple University cultural collections to approximately one million records, is file import and export friendly and will support multiple repositories. The software is web based and has a strong user community, which offers continuous active functionality development.

The Project Steering Committee also accepted the recommendation for a post-project roadmap, to subsequently implement [Omeka](#) as a discovery tool overlaying AtoM, as well as investigating a geo-mapping tool, with a preference for [GeoServer](#) and [Artefactual's Archivematica](#) for digital preservation. Omeka will offer the potential to interoperate with the systems used by other Tasmanian cultural collections to provide a single point of discovery for all.

The technical implementation of AtoM was completed in November, a joint collaboration between the Library, the University's Systems staff and GAIA Resources, with the business implementation continuing through December and January. A senior archivist from the University of Melbourne was seconded as a consultant. He worked closely, at times face to face but primarily from Melbourne, with the Special & Rare Collections staff, to establish processes and procedures, as well as supporting them with training. This training included the gaining of a basic understanding of archival material and how to deal with its nuances. Working closely with the consultant, a recently graduated librarian/archivist, whose time was dedicated to

developing a sound understanding of the technical aspects of AtoM and the development of procedures around its use. The Special & Rare Collections team worked well with the consultant and the librarian/archivist, valuing the opportunity to not only learn about a new system but about a new way of working. The experience and working knowledge gained, will contribute to the implementation of AtoM at the Percy Grainger Museum. Part of the consultant's brief, was to ensure that material was ready for the pilot. TAHO staff provided support with digitisation of the maps chosen for the pilot. We continued to work closely with our colleagues at TMAG despite the delay encountered for their project.

Although strictly speaking out of scope of the original project, money from the project enabled the Library to employ two librarians on a casual basis, to investigate the discovery and exhibition software Omeka. The University's central Information Technology Services (ITS) set up a 'sandbox' to enable the testing of both Omeka Classic and the new beta version, Omeka S. The latter potentially providing a better fit for the needs of larger institutions that have the requirement to deploy many Omeka sites from one installation. As well, there were indications of improved functionality for online exhibitions and better interoperability with other systems, including linked open data. The recommendations to proceed with the implementation of Omeka S were signed off in February and a demonstration added to the agenda for the final Steering Committee meeting. This will be of particular interest to one of our academic stakeholders, who has previous experience using Omeka for the [Companion to Tasmanian History](#).

Technical support from GAIA Resources and archival processes support from [Recordkeeping Innovation](#), will assist the Library with post-implementation activities until the end of 2017. Post-implementation discussions with GAIA Resources, have included them working with the Library to progress our roadmap, including the possible implementation of Omeka, Achivematica and GeoServer. The project has enabled us to purchase a small quantity of archival supplies, memberships and training materials. Finally, the project has also provided funding support to Special & Rare Collections staff to attend related workshops and seminars, to assist them with the new system and processes.

Over the final two days of January, we held two functions to thank both our internal and external colleagues who had supported the project, the Project Steering Committee, ITS and Library staff. The project consultant provided presentations to the Library's Executive group and Special & Rare Collections team and a considerable amount of documentation was handed over to the Library. The amount of project documentation was considerable but importantly included priorities, procedures, contacts list and draft project closure report for the final Steering Committee meeting, as well as a roadmap for the future, if funding opportunities present themselves. Go-live however was scheduled for early March, to coincide with a demonstration to the Steering Committee, at the Project closure meeting. The Library's Special & Rare Collections project officially finished January 31. After an intensive and concentrated eight months, including a hectic final month to make the best possible use of the remaining budget in the hand over, the Project Manager handed over to the Library, through a series of meeting with the relevant staff.

The importance of collaboration to project success

Collaboration with both our internal and external partners had begun early in the process. Tasmania is a small state and collaboration offers many advantages. Being small, people at each organisation are known to each other, understand the mutual constraints and so collaboration is so much easier to arrange. Tasmania is also rich with historical and digital information, located in known and unknown locations across Tasmania, the mainland and in overseas collections. There is an enormous potential for future research projects and grants. Researchers from anywhere in the world, at any career state, can identify unique research opportunities utilising the Library's Special & Rare Collections. The Library's system is potentially a portal and repository for the description and management of some or all of the University's other cultural collections.

Following completion of our initial funding bid in 2015, the Library began to consider ways to position ourselves to take up wider opportunities for funding bids, for example an ARC Linkage Infrastructure,

Equipment and Facilities (LIEF) grant, amongst others. Securing partner funding was essential as part of this process. A successful 2017 LIEF grant, would enable the Library to take a whole of state approach, to what we saw as phase 2 of our initial project.

Both TAHO and TMAG had already submitted their own and joint bids for similar projects. Following consultation with their senior staff, they readily agreed to support our bid and the opportunity to work collaboratively across multiple projects, both funded and under consideration. The University Librarian then convened a meeting with a number of identified key academics to garner additional internal support and ideas for the Library's plan to identify and position for future funding opportunities.

The Library's funding bids in this area, represented a cross- institutional, large-scale collaborative approach to the discoverability of digital information assets and collections related to Tasmania's cultural and historical heritage, with a particular focus on implementing research infrastructure for local research advantage and cultural tourism. This core group of academic supporters that had been assembled, were both engaged and excited about the Library's vision and would go on to provide valuable support to our Project Steering Committee as well as engaging in a number of associated opportunities involving Library staff in the months following.

The first of these was the Australasian Association Digital Humanities Conference, held in conjunction with the Digital Panopticon: Penal History in a Digital Age. Both were held in Hobart in June 2016 and each chaired by one of the two Academics on our Steering Committee. Library staff and the Project Manager were invited to attend, which enabled them to meet and engage with a range of delegates, who provided not only starting points for the project but also some key additional contacts, that would prove invaluable as the project progressed.

Having a senior member of the University's Information Technology Services, as a member of the Steering Committee and as a conduit to the services that ITS provide, was essential. Support throughout the project from this team was timely and professional across many areas. An associated benefit was the Steering Committee gaining a sound understanding of other current ITS projects of relevance to the project, particularly the Research Data Storage Service and the work being done around machine learning and photo captioning. Almost by accident towards the end of the project, through a series of conversations, the Project Manager made contact with the Manager of Data and Information Systems at the University's Institute for Marine and Antarctic Studies, who confirmed he had GeoServer expertise. He has agreed to work with the Library and we plan to meet with him, at the earliest mutual opportunity.

Early in the process, a number of the University's academics provided strong strategic examples of their future needs, including research and new facilities, which will use the proposed digital information, made available by the implementation of this project. These proposed projects will have a strong dependency on the discoverability of the Library content. These included early discussions about having research students working on identified projects in the Special & Rare Collections. The University's College of Arts and Law has proposed a new minor in Digital Humanities, which will utilise the Library's Special & Rare Collections. Potentially this could provide pathways into honours and postgraduate work, equipping students with skills and training in in areas of current and emerging University research strengths, as well as the creation and analysis of big data.

Another valuable collaboration opportunity generated out of this project, was the chance to meet with a senior academic from the Graduate School of Library and Information Science at the University of Illinois, Urbana-Champaign and Adjunct Professor at the University of Tasmania. He was visiting Australia and meeting with his co-researcher, the University's Professor of Computing and agreed to meet with the Project Manager, Project Sponsor and the University Librarian. His research focus is around human computer interaction (HCI), interaction design and human centred design. The meeting discussed how their research could inform the decision making around the project's selection of a solution, focusing on the

[Maine Model](#), an integrated solution, covering local history up into a state-wide model, hooked into crowdsourcing, education and curiosity. Information gathered at this meeting was fed into the future roadmap developed by the Project Manager.

Senior staff of both TMAG and TAHO freely offered their time and expertise throughout the project, TAHO providing digitisation facilities and advice on standards and archival processes, as well as sharing information and staff from their own ongoing projects. The Project Manager met with the QVMAG Librarian, who contributed some of their maps and plans to the project pilot.

There is a strong community of AtoM users in Australia and their willingness to help, share and talk with those of us starting our implementation was immensely valuable. The ANU's University Archivist at the Butlin Archives and the Manager of Digital Archives, Western Australian State Records, both whom have previously implemented AtoM, provided invaluable advice and detailed documentation in support of the project. Their ongoing support was reiterated in phone meetings towards the end of the project as part of the handover of important relationships to the Project Sponsor.

The Project Manager in her final wrap up of the project, reported that she had been in touch with over 50 different organisations, all documented with contact details. The majority of those that she spoke with, had been very generous in sharing their knowledge with her. Without this support, the end result for this project would have been a very different one.

After the project handover

With the conclusion of the official project, the Library established two ongoing working groups. The first was to an internal one, to progress any outstanding issues and tasks remaining from the project. This group, meeting weekly, consists of the senior staff with responsibility for Library Systems, Collections and Discovery, as well as the author. It has established a new post-project issues log, with 25 issues identified at the first meeting. This group is focusing firstly on setting clear priorities and timelines for ongoing work, how to progress the pilot; the delivery of further demonstrations, particularly to the Project Steering Committee and academic staff that have supported the project, as well as preparing to go live. Following that, we will be looking at where to best store the digital images;; where and how to provide access via the Library's website; interoperability between the new and current systems; as well as making decisions about how to deal with 3000 legacy items that have been previously described and stored in an open access repository. This group is engaged and feeling very positive about the outcomes they can achieve. The challenge will be to keep that momentum going, as other priorities intercede.

The final project closure meeting for the Steering Committee has been scheduled for early March and the Library team has set this as a target for go-live and further presentations. The Steering Committee members agreed readily to meeting regularly on an ongoing basis post-project, as all felt the experience of collaboration and cooperation had been an important and valuable one. There is an understanding that there will be new opportunities to collaborate on funding bids and other projects in this space.

A triage model for ongoing technical support has been established, with first resort being the extensive documentation that is available for AtoM. This will be followed by consulting the AtoM Users Google Group that has been established for support questions. According to feedback from other AtoM users, most issues post-implementation are resolved by timely responses from the Group. Finally, we have access to GAIA Resources for ongoing technical support and Recordkeeping Innovation for ongoing practical archival support and training. Some discussions are already underway with GAIA around using their expertise to advance one of our higher level next priorities, rather than use it on day to day technical issues, perhaps better resolved via the Google Group. ANU and WA State Archives have both confirmed that

support needs for AtoM are small and that most questions are managed through the thorough documentation or through the AtoM Google Group set up for support.

Limited resources will mean that significant progress in the populating of AtoM will be a challenge. There are ongoing discussions about the knowledge being shared more widely than just the Special & Rare Collections staff, to enable other Library staff to assist, depending on other work priorities. It will be critical for the Library to establish a viable volunteer program and this will be a priority in 2017.

The Library is also looking to apply for further funding. We have been encouraged to apply to do this, to support what work had already been done with the project. We now have clear priorities as to what we want to do next strategically, seeing phase two as:

- Prioritising and creating records for Special & Rare Collections material
- Importing images and data from the Library's Open Repository to AtoM
- Continuing with the implementation of a Discovery layer (Omeka) to facilitate online exhibitions and increase the discoverability and accessibility of the collections
- Investigating Artefactual's Archivematica, the open-source digital preservation system, used in conjunction with AtoM.
- Implementing Geoserver, which enables sharing of geospatial data, thereby allowing Special & Rare material to be geographically located
- Investigating and implementing interoperability between AtoM, the Library Open Repository, Omeka and Geoserver

This will mean continuing a close liaison with the other Tasmanian cultural institutions and a focus on positioning the Library, for additional grant funding. This in turn will continue to facilitate the discovery of unique historical and cultural items, across all major Tasmanian cultural institutions.

Conclusion

In this paper, I have tracked the exciting and challenging journey that was the University of Tasmania Library's Special & Rare Collections project. Starting with a successful funding bid and recruitment of a Project Manager, to initiation and initial information gathering, on to difficulties around expectations, timelines, scope creep and workload and capacity issues. Finally, a recommendations around Artefactual's AtoM as the preferred system, as well as a roadmap for additional complementary systems and a successful project closure. Collaboration both internal and external, ensuring not only the success of the project but a path laid down and relationships established, that will ensure continuing cooperation for ongoing and future development.

By the time this paper is presented, this first stage of post-implementation will have been completed. We will have gone live, developed and delivered our pilot and demonstrations, as well as having established both an internal post-project team and an ongoing external collaborative group. The project will have been officially signed off by the Steering Committee. In hindsight, we should have thought more carefully about our resourcing requirements for this project and its impact on our small team. This has been an important lesson for planning future funding bids. Despite the challenges however, when revisiting our original four objectives, we had achieved two and are on track to achieve the other two, in the coming months. For the four broad areas articulated as part of the project plan as being essential for any system selected – archival and preservation, research, quality user experience and interoperability we believe that post project, we are also well on track to achieve these in the coming months.

We had set our sights on one solution but it was not one but a suite of solutions that was delivered in the end, as well as a roadmap for the future, developed for both the University Library and our collaborators. A dedicated Project Manager who wanted to make sure she 'saw us over the line', no matter how difficult

the project was at times, by the end delivered something we believe, is quite unique. 50+ organisations and individuals from around the country and abroad consulted, with incredible engagement from contacts made, showing willingness to share knowledge and documentation, who could see what we wanted to do and who wanted to be a part of our journey.

References

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